

Patent claims:

1. Spark plug with an insulator body and a center electrode, wherein said center electrode is housed at least partially in a bore in said insulator body, said center electrode being sealed off from said insulator body by at least one sealing ring surrounding said center electrode, characterized in that said sealing ring comprises material that is plastically deformable by compression.
2. Spark plug according to claim 1, characterized in that said sealing ring comprises at least one metal or one alloy of metals.
3. Spark plug according to claim 1, characterized in that said sealing ring comprises a metal from the group formed from soft irons and copper and nickel and high-grade steel, or aluminum materials or alloys of these materials.
4. Spark plug according to claim 1, characterized in that said sealing ring rests against the insulator body at that end of said insulator body which, in the fitted position of the spark plug, points to a combustion chamber of an internal combustion engine.
5. Spark plug according to claim 4, characterized in that said sealing ring rests against the insulator body in a recess of same partially covering said sealing ring.
6. Spark plug according to claim 1, wherein a center electrode carrier being pushed or pressed or welded or the like onto the end of said center electrode which, in the fitted position, points to a combustion chamber of an internal combustion engine, characterized in that said sealing ring is arranged or clamped between said center electrode carrier and said insulator body.
7. Spark plug according to claim 1, wherein an attachment ring being pushed or pressed or welded or the like onto the end of said center electrode which, in the fitted position, points to a combustion chamber of an internal combustion

engine, characterized in that said sealing ring is arranged or clamped between the attachment ring and the insulator body.

8. Spark plug according to claim 6, characterized in that said center electrode carrier or said attachment ring is welded to said center electrode by continuous or pulsed laser welding or TIG welding or plasma welding or electron-beam welding or resistance welding.
9. Spark plug according to claim 1, characterized in that said center electrode comprises an area of enlarged diameter outside the insulator body at its end which, in the fitted position of said spark plug, points to the combustion chamber of an internal combustion engine and said sealing ring is arranged or clamped between said area with enlarged diameter and said insulator body.
10. Spark plug according to claim 1, characterized in that said sealing ring is arranged or clamped inside said insulator body between a shoulder of the insulator body, surrounding said center electrode, and an area of enlarged diameter of said center electrode.
11. Spark plug according to claim 1, characterized in that said insulator body is a ceramic insulator body.
12. Spark plug according to claim 1, characterized in that said center electrode is sealed off from said insulator body exclusively by at least one sealing ring surrounding said center electrode.
13. Process for the manufacture of a spark plug according to claim 1, characterized in that the process comprises the following steps:
 - a) Introduction of said center electrode into said bore provided for this in said insulator body, wherein at least one sealing ring or all sealing rings being arranged at the point provided for it (them),
 - b) Compression of said center electrode with said insulator body, said sealing ring(s) sealing off said center electrode from said insulator body and being plastically deformed.

14. Process according to claim 11, characterized in that during or after process step b) a center electrode carrier or at least one attachment ring is pushed or pressed or welded onto the end of the center electrode which, in the fitted position of said spark plug, points to the combustion chamber of an internal combustion engine, said sealing ring sealing off between said center electrode carrier or the attachment ring on the one side and the insulator body on the other side, and being plastically deformed.